



PTO/SB/21 (09-04)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL FORM (to be used for all correspondence after initial filing)		Application Number	10/720,716-Conf. #5403
		Filing Date	November 24, 2003
		First Named Inventor	Peter C. Song
		Art Unit	2821
		Examiner Name	T. V. Dinh
Total Number of Pages in This Submission	11	Attorney Docket Number	64032/P010US/10309493

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Part B Issue Fee Transmittal (2 pages; 1 original, 1 copy) Comments on Statements of Reasons for Allowance Amendment Under 37 CFR 1.312 International Search Report dated 2/17/2005 Return Receipt Postcard
<div>Remarks</div>		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm Name	FULBRIGHT & JAWORSKI L.L.P.		
Signature			
Printed name	Thomas Kelton		
Date	May 22, 2006	Reg. No.	54,214

Transmittal	
I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV 629204426 US, on the date shown below in an envelope addressed to: MS Issue Fee, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.	
Dated: May 22, 2006	Signature: (Scott Matthews)



Docket No.: 64032/P010US/10309493
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Peter C. Song et al.

Application No.: 10/720,716

Confirmation No.: 5403

Filed: November 24, 2003

Art Unit: 2821

For: LOW COST, MULTI-BEAM, MULTI-BAND
AND MULTI-DIVERSITY ANTENNA
SYSTEMS AND METHODS FOR WIRELESS
COMMUNICATIONS

Examiner: T. V. Dinh

COMMENTS ON STATEMENTS OF REASONS FOR ALLOWANCE

Mailstop Issue Fee
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Applicant thanks the Examiner for the effort and cooperation during the prosecution of this application. Applicant further appreciates the Notice of Allowability. However, Applicant respectfully notes that the Examiner's statement of reasons for allowance does not correctly characterize some of the claims. The reasons for allowance state:

The cited art of record fails to teach a multi-band and multi-diversity antenna array comprising a plurality of antenna elements, said elements providing a plurality of beams, each of said beams selectively having diverse beam polarization or beam width and an integrated feed network feeding the elements and providing adaptive beam forming for said plurality of beams, said feed network comprising switched phase shifters wherein said beams are selectively defined in different directions as define in claims 1, 3-4, 8, 64, 74, 79-81, or higher frequency antenna elements interleaved with a lower frequency antenna elements and an integrated feed network comprising switched phase shifters which feed each of the elements from separate input and providing adapted beam forming for the plurality of beams and said feed network comprising switched phase shifters as defined in claim 71. Therefore, claims 1, 3-8 1 and 83-128 are presently allowed.

Notice of Allowability at 2. However, it is believed that the statement could be read to imply that some claims include limitations that are not actually found therein. For example, the above statement implies that each of claims 1, 3-4, 8, 64, 74, 79-81 include the limitation “wherein said beams are selectively defined in different directions.” However, that feature is found in independent claims 1 and 80 and is not found in independent claims 3, 4, 8, 64, 71, 74, 79, and 81.

It would be more accurate to say that each of the independent claims are allowable because the art of record does not teach or suggest at least the following features of the independent claims: “an integrated feed network feeding said elements from an input and providing adaptive beam forming for said plurality of beams, said feed network comprising switched phase shifters, wherein said beams are selectively defined in different directions,” as recited by claim 1, “an integrated feed network feeding said elements from an input and providing adaptive beam forming for said plurality of beams, said feed network comprising switched phase shifters wherein said characteristics include beam polarization,” as recited by claim 3, “an integrated feed network feeding said elements from an input and providing adaptive beam forming for said plurality of beams, said feed network comprising switched phase shifters wherein said characteristics include beam width,” as recited by claim 4, “an integrated feed network feeding said elements from an input and providing adaptive beam forming for said plurality of beams, said feed network comprising switched phase shifters wherein said array is a wireless local area network antenna array,” as recited by claim 8, “said elements providing a plurality of beams, each of said beams selectively having diverse characteristics; and a feed network defined on said printed circuit board, said feed network feeding said elements from an input and providing adaptive beam forming for said plurality of beams, said feed network comprising switched phase shifters,” as recited by claim 64, “each of said lower frequency beams selectively having diverse characteristics... a plurality of higher frequency antenna elements interleaved with said lower frequency elements... each of said higher frequency beams selectively having diverse characteristics; and an integrated feed network feeding said plurality of lower frequency antenna elements from a separate input from said higher frequency antenna elements and providing adaptive beam forming for said plurality of beams, said feed network comprising switched phase shifters,” as recited by claim 71, “each of said beams selectively having diverse characteristics; and a feed network defined on said printed circuit board, said feed network feeding said elements from an input

and providing adaptive beam forming for said plurality of beams, said feed network comprising switched phase shifters,” as recited by claim 74, “feeding a plurality of antenna elements with a switched phase shifter feed network... providing by said feed network adaptive beam forming for said plurality of beams, wherein said characteristics include beam width,” as recited by claim 79, “feeding a plurality of antenna elements with a switched phase shifter feed network... and selectively defining said beams in different directions,” as recited by claim 80, and “feeding a plurality of antenna elements with a switched phase shifter feed network...and providing by said feed network adaptive beam forming for said plurality of beams, wherein said characteristics include beam polarization,” as recited by claim 81.

It is respectfully submitted that each of the claims are limited only by their own specifically-recited features. Moreover, Applicant has shown how the features set forth in each of the allowed claims distinguish over the applied art. Thus, each of the claims pending in the present application are in condition for allowance and should pass to issue.

Once again, Applicant thanks the Examiner for the Notice Of Allowability. However, should the Examiner disagree with Applicant’s statement above, the Examiner is respectfully invited to reopen prosecution.

It is believed that no fees are due with this response. However, if any additional fees are due, please charge Deposit Account No. 06-2380, under Order No. 64032/P010US/10309496 from which the undersigned is authorized to draw.

Date: May 22, 2006

Respectfully submitted,

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail, Label No. EV 629204426 US in an envelope addressed to: Mailstop Issue Fee, Commissioner for Patents, Alexandria, VA 22313.

Date of Deposit: May 22, 2006

Typed Name: Scott Matthews

Signature: Scott Matthews

By: Thomas L. Kelton
Thomas Kelton
Registration No.: 54,214
FULBRIGHT & JAWORSKI L.L.P.
2200 Ross Avenue, Suite 2800
Dallas, Texas 75201-2784
(214) 855-7115
(214) 855-8200 (Fax)
Attorney for Applicant